## **BIOSOLIDS EXPERT PANEL**

**Meeting Minutes** 

Date: November 16, 2007

Location: House Room 3, Capitol Building, Richmond, VA

## **Co-Chairs:**

• L. Preston Bryant, Jr., Secretary of Natural Resources

• Marilyn B. Tavenner, Secretary of Health and Human Resources

### **Panel Members Present:**

- Dr. Ralph O. Allen, University of Virginia School of Medicine
- Russ Baxter, Virginia Department of Conservation and Recreation
- **Jerre Creighton**, Virginia Department of Forestry
- Barry Dunkley, City of Danville
- **Dr. Tom Fox**, Virginia Tech Department of Forestry
- James Golden, Virginia Department of Environmental Quality
- Scott P. Johnson, Virginia Department of Agriculture and Consumer Services
- **Dr. Howard Kator**, Virginia Institute of Marine Science
- **Dr. Mark Levine**, Virginia Department of Health
- Christopher Peot, Blue Plains
- **Dr. Alan B. Rubin**, Consultant (Principal, Envirostrategies, LLC)
- Henry Staudinger, Citizen representative
- **Dr. Jonathan Sleeman**, Virginia Department of Game and Inland Fisheries

### The following members of the panel were unavailable to attend:

- **Dr. Robert Call**, Medical practitioner
- **Dr. W. Lee Daniels**, Virginia Tech Department of Crop and Soil Environmental Sciences
- Dr. Greg Evanylo, Virginia Tech Department of Crop and Soil Environmental Sciences
- **Dr. Rima B. Franklin**, Virginia Commonwealth University Center for Environmental Studies
- Dr. Robert Hale, Virginia Institute of Marine Science
- Dr. John T. Novak, Virginia Tech Department of Civil and Environmental Engineering
- Karen Pallansch, Alexandria Sanitation Authority
- Dr. Susan Fischer-Davis, Virginia Department of Health
- Dr. R. Leonard Vance, Virginia Commonwealth University School of Medicine

### Supporting staff present:

- Betsy Bowles, Virginia Department of Environmental Quality
- **Jeff Corbin**, Office of the Secretary of Natural Resources
- Mike Foreman, Virginia Department of Conservation and Recreation
- **Bill Hayden**, Virginia Department of Environmental Quality
- Robert Hicks, Virginia Department of Health
- Gail Jaspen Office of the Secretary of Health and Human Resources
- Neil Zahradka, Virginia Department of Environmental Quality

# Introduction and Approval of Minutes

Secretary of Natural Resources L. Preston Bryant, Jr. brought the meeting to order at 2:00 p.m.

Secretary Bryant entertained a motion and second to approve the minutes from the September 18, 2007 full panel meeting. The minutes were approved by unanimous vote.

Secretary Bryant introduced Mike Foreman as the facilitator for the meeting.

## Information Dissemination

Mike Foreman referred to the agenda and introduced Neil Zahradka to open the discussion on information dissemination.

Neil Zahradka directed the panel's attention to a document, provided as a proposal for the panel, outlining guidelines for submission of information to be included on the biosolids expert panel website. These guidelines would apply to members of the panel and the public. Mr. Zahradka explained that supporting staff felt some guidelines were necessary in order to properly address expectations of the panel and the public as what is posted versus what is just provided to the panel via email. The panel reviewed the proposal and offered the following comments:

Russ Baxter asked if a visitor to the website would have to click on a panel member's name to see information they had provided.

Neil Zahradka indicated that each panel member's submission titles would be posted on one page next to the panel member's name. He clarified it is not necessary to click a member's name to see the titles of the submissions.

Russ Baxter asked how personal medical information submitted is handled, and what privacy issues arise. He specifically mentioned the documents provided to the panel today from Mr. C.W. Williams.

Neil Zahradka explained that with regard to posting on the website, unless the information submitted by the public is specifically requested to be posted, it is only sent to the panel members. He did indicate that all information submitted to the panel is subject to FOIA.

Secretary Bryant indicated that he had exchanged information with Mr. C.W. Williams regarding the information submitted, and it was understood that this information would become part of the public record. Secretary Bryant noted that when information is submitted electronically by the public, that a quick email exchange making sure that they understand the information does become public would be desirable. He then asked if any of the physicians on the panel could comment on the subject.

Mark Levine noted that HIPPA applies to health care providers only, not the public in general. He noted, however, that some documentation that the submitter understands the privacy issues would be desirable. Secretary Bryant agreed that when the panel receives any personal medical information, documentation of understanding of the FOIA requirements should be obtained.

Alan Rubin asked if the privacy issues would preclude the panel from asking for certain information. Secretary Bryant noted that the panel could ask for anything, but before someone submits the information, they should be aware of FOIA.

Henry Staudinger asked what is the meaning of "inappropriate content" as described in the information dissemination proposal. Neil Zahradka asked Bill Hayden, public affairs director for DEQ to respond to the question. Mr. Hayden noted that the definition could be established by the panel, or if the panel preferred, DEQ staff could establish a definition.

Scott Johnson asked if personal identifying information could be redacted by staff from what was requested through FOIA. James Golden noted that DEQ staff does not redact confidential information on its own, that request is made by the submitter.

Secretary Bryant noted that the website should include, in some conspicuous place, a note stating that personal information submitted to the panel is subject to FOIA.

Barry Dunkley asked if the submitter request that information be excluded from FOIA. Several members of the panel voiced the opinion that it could not be excluded, and Bill Hayden responded that DEQ staff's understanding is the same.

Secretary Bryant stated that these thoughts on confidentiality will be compiled, and suggested this issue should be discussed with the FOIA council. He stated if anything different emerges from those discussions, the panel will be notified.

Neil Zahradka stated that DEQ staff could further define "inappropriate information" in regard to what is posted on the website and provide a definition for the panel to review. Secretary Bryant noted that DEQ, VDH, and DCR all have professional public information officers that could provide input into that definition.

Barry Dunkley requested that that definition be made available as soon as possible.

Mike Foreman asked if there were any other issues regarding information dissemination, and Neil Zahradka asked the panel members that when submitting articles or other information, that they specify whether the article is for posting on the website or simply distribution to the other panel members. He noted that if information is copyrighted, the link to where the information may be obtained is provided, rather than the text itself. He also noted that unless members of the public specify that information submitted for the panel's consideration be posted on the website, it is only emailed to the panel members, and that staff would try and make this clearer on the website.

## **Public Comment Guidelines**

Mike Foreman referred to the agenda and asked Neil Zahradka to introduce the topic of public information. Neil Zahradka noted that some issues had arisen with regard to time for public comment at the end of the health committee meeting, and that the expectation for the public should be made clearer. He noted that the standard time given at DEQ meetings is three (3) minutes per person, but the panel could decide instead on some other option, such as offering a fixed block of time at the end of each meeting for public comment.

Mike Foreman requested input from the panel on this issue.

Ralph Allen suggested limiting the time for each person.

Alan Rubin suggested limiting the time, and making it clear that anything further could be submitted in writing. He further suggested that written comments are preferable, because every word is captured.

Chris Peot noted that hearing what the public has to say is important, and that three minutes might not be enough time. He noted that since we have not had very many people commenting at each meeting, limiting the time was less important.

Tom Fox noted that if more people do want to comment, then a set block of time may not be sufficient, so the overall block may need to be extended.

Howard Kator suggested adjusting the time per person based on the available time and the number of people requesting to comment.

Tom Fox asked if we could use the website prior to the meeting to determine how many people plan to speak.

Chris Peot noted that everyone who attends may not utilize the website.

Mark Levine suggested that the time to be allotted for public comment at each meeting should be one of the first agenda items for each meeting.

Secretary Bryant noted that it should be understood that in the event of extraordinary situations at any particular meeting that the chair, with the permission of the panel, could alter the rules for public comment as necessary to accommodate.

# Summary of Subcommittee Meetings

Mike Foreman referred to the agenda and Neil Zahradka summarized the activities of the two workgroups.

Neil Zahradka referred to the draft report structure document, and the bulleted items included for each workgroup.

## Environmental Workgroup

Neil Zahradka presented the following as the primary focus of the environmental workgroup, as identified by the workgroup during its first meeting:

- Will examine the following resolution questions
  - 4) To what degree do biosolids-associated contaminants affect water quality?
  - 5) What are the effects of an accumulation of biosolids-associated contaminants in wildlife?
  - (i) perform a detailed analysis of the chemical and biological composition of biosolids
  - (ii) evaluate the toxic potential of biosolid constituents derived from land application to humans, agricultural products, soil organisms, and wildlife
- o Will request biosolids testing and analysis data from wastewater treatment plants
- o Will develop a bibliography of existing articles and studies
- o Will invite an expert outside the panel to present a summary of the EPA 503 Risk Assessment
- o Will work under a presumption that the environmental effects are based on appropriate agricultural land application rates
- o Will consider the issue of compliance assurance

Mike Foreman then asked the panel if there were other topics to be added to the list.

Henry Staudinger noted that it would be preferable to have this information available well in advance of each meeting, as seeing it for the first time at the meeting it is more difficult to provide comment.

Ralph Allen asked where the request for biosolids analysis would be directed.

Chris Peot explained that the request was planned to be sent to all wastewater treatment plants that land apply in Virginia.

Barry Dunkley asked if that letter had been sent. Neil Zahradka responded that Chris Peot had provided a first draft. Neil sent it to the panel for comment, and a few comments had been received. He noted that a second draft will be sent to the panel for review before it is sent to the plants.

Alan Rubin asked what use the information will be if we get results that show contaminants. He asked how the panel or regulatory information will use the information on biosolids content.

Henry Staudinger replied it will depend on what is in it.

Chris Peot replied that because they have an extensive pretreatment program, and they test for many parameters. He stated he would like to present the information in order to show that many results are non-detect. He also stated that presence of a contaminant does not equal danger, and that comparisons of the levels found to background levels in soils or in household products may be useful for comparison.

Barry Dunkley stated that he felt it would help educate the panel members, as well as to add additional information that may not be currently available.

Jonathan Sleeman noted that this exercise is a specific charge for the panel.

Tom Fox again stressed that presence does not equal significant risk.

Barry Dunkley noted that what is found may lead to the realization that there are other parameters that may require testing.

## Health Workgroup

Neil Zahradka presented the following as the primary focus of the health workgroup, as identified by the workgroup during its first meeting:

- o Will examine the following resolution questions
  - 1) Are citizen-reported health symptoms associated with the land application of biosolids?
  - 2) Do odors from biosolids impact human health and well-being and property values?
  - 3) To what degree do biosolids-associated contaminants accumulate in food (plant crops and livestock)?
- Will work on an exercise to systematically document and evaluate citizenreported health symptoms associated with the land application of biosolids
- o Will compile a literature review regarding health effects related to odors
- o Will compile a literature review regarding bioaccumulation in the food chain
- o Key health questions to be addressed include
  - Adequate buffers
  - Aerosols

- Endotoxins
- Odors

Tom Fox questioned the rationale for including property values under the health topic.

Chris Peot replied that although he felt it was tangential, some members of the group felt that the stress imposed by reduced property value could cause health problems.

Henry Staudinger replied that this is one of the questions posed to the panel, and that since health problems might be related, it was posed to the health workgroup. He also noted that progress on this issue would be stalled due to the fact that only two people were assigned to the subgroup, but those meetings of the two would need to be public noticed.

Neil Zahradka clarified the situation that indeed a subgroup had been defined of Henry Staudinger and Rob Hale to look at property value issues, and that would qualify as a working group requiring public notice of their meetings. He noted that this issue would need to be resolved at the next health workgroup meeting.

Jonathan Sleeman asked that since the last four items were listed as key health questions (buffers, aerosols, endotoxins, and odors), would that preclude the group from looking at things like pathogens in general.

Neil Zahradka responded that those were listed as priority items due to the fact that they were more "unknown". He asked Dr. Rubin to comment on his previous comments on this subject.

Alan Rubin noted that the National Academy of Sciences study, the VDH study, and a study being conducted in the United Kingdom were excellent documents to reference, and wished that the panel consider embracing those documents as already identifying what needs further research.

Chris Peot also noted that the list of 62 Water Environment Research Foundation (WERF) projects includes many studies on these topics.

Alan Rubin suggested that all members of the panel read all the documents in order to see what has already been done with regard to research on the questions posed to the panel.

Mark Levine asked that, regarding the list of bullets for the health workgroup, that the discussion of reviewing citizen involvement in the permitting process should be included. Neil Zahradka indicated that addition would be made.

Mike Foreman asked for any additional comments on the health workgroup topics.

## Investigating Citizen Health Complaints

Chris Peot noted that two approaches to investigating citizen health complaints had been recently introduced to the panel. He stated that Dr. Vance had sent a draft questionnaire for panel review that he planned to use with his students as part of a class project. Also, Chris had received permission from WERF to release a copy of the "Incident Investigative Protocol" for evaluating citizen health complaints related to biosolids land application. He sent this information to Neil Zahradka and it was forwarded to the panel.

Neil Zahradka asked if the panel would be interested in discussing Dr. Allen's submission of a questionnaire that he proposed be sent to the public to gain information about health complaints associated with biosolids land application. The panel agreed that they would like to use the time to address the issue. Neil explained that in order to have the panel officially endorse Dr. Allen's

questionnaire, the time required to do so in the context of public meeting requirements might preclude him from using it in his class this semester. He further explained that there was nothing prohibiting Dr. Allen from using his questionnaire in his class without panel endorsement, as long as it was not presented as an exercise being conducted by the panel as a whole.

Alan Rubin noted he did not object to Dr. Allen moving forward with his questionnaire. He noted that it will take a long time to implement the WERF protocol. He felt that a priority item needs to be a complete evaluation or validation of the health issues that have been presented by Virginia citizens, and he did not have a problem with collecting additional information. He did not feel, however, that Dr. Allen's exercise should replace a more comprehensive evaluation.

Ralph Allen described his questionnaire and how it was developed. He stated they started with a questionnaire from Mark Levine, and the medical doctors in his class wanted to evaluate much more information to provide for a true evaluation. In the short amount of time that is available, however, they decided to focus on providing a mechanism for citizens to register their concerns and complaints. The draft questionnaire was evaluated by the university's institutional research board, and in order to avoid it being labeled as a "human investigation".

Russ Baxter asked how a "human investigation" is defined.

Ralph Allen explained that in the context of UVA research, any study that systematically studies humans must be reviewed by the board so that appropriate precautions are taken so that information is not misused. In addition, loss of public funding could occur if the rules are violated. The questionnaire was modified so that it was much more general, and served more as a registry of health issues rather than a tool for full evaluation. He also stated that the one and a half page tool would be easier to fill out than the 50 page WERF document.

Mike Foreman asked Neil Zahradka if it was his intent to reach some agreement from the panel on this topic at today's meeting.

Neil Zahradka replied that if the panel were willing to use the time today to discuss the issue, he thought it would be beneficial.

Jonathan Sleeman asked if there was benefit to expanding the study to get the information you need for a full evaluation.

Ralph Allen replied that one would eventually want to do that, but it would be much more time consuming.

Alan Rubin stated that to have any value, the full evaluation must be done. He stated that otherwise, the panel will not be able to come to any consensus as to whether or not the health issues are valid.

Henry Staudinger replied that since we don't know what is in biosolids, the panel will never be able to come find the answer Dr. Rubin is looking for. He stated he would like to work towards something this panel could do, such as looking at, from the medical doctors' points of view as to whether with the symptoms people have, whether or not they should continue to be exposed to biosolids. He also stated that in some way having the burden for proof that biosolids land application is safe for the adjoining residents shifted to the land applicator would be beneficial. He again stated that this was a more realistic goal for the panel.

James Golden stated that he also did not believe the panel could come to full medical conclusions about certain cases. He stated it was important for the panel to look at how to

address individuals that have noted health issues after biosolids applications and how future applications would be regulated. He also stated the regulatory scheme should address how to identify people at risk before the applications occur.

Scott Johnson commented that since Dr. Allen has volunteered his resources for this exercise, the panel should accept his contribution and take whatever value can be obtained from it, in spite of the fact that it may not be complete information as Dr. Rubin pointed out. He stated it would help the panel to quantify the numbers of people affected by the issue, and possible offer information to assist with future legislative requests from the panel.

Barry Dunkley stated that without information from a physician, the information submitted by the public may or may not be accurate. He stated that the buffer issue regarding health effects is a sensitive issue, and does not know if the survey will help the function of the panel.

Mark Levine commented that it would be wonderful to do a full study, but we don't have the resources. He noted that there are physicians who have stated further exposure to biosolids should be avoided. He stated that a question before the panel is how much adverse health information does the panel need before you recommend policy change or some alternate course of action. He noted that we are all saying we need more data, but at what point would we have enough data to make some decisions.

Mike Foreman asked Neil Zahradka if this conversation was productive in providing enough direction to move forward.

Neil Zahradka noted that it was up to the panel as to whether or not to use Dr. Allen's efforts or not.

Mark Levine noted that the health workgroup had recognized there was an opportunity to gather information using the medical students, and realized there was a short timeframe to gather data. He noted that this survey approach isn't perfect, but is an opportunity, and recommended the panel allow Dr. Allen to move forward with the survey or without panel endorsement. He suggested Dr. Allen could move forward in collecting information, and then submitting the information to the panel at a later date.

Mike Foreman asked if there was any panel member that objected to Dr. Allen's survey moving forward.

Russ Baxter stated that he did not feel the panel could stand in the way of Dr. Allen moving forward with a class project. He added that some information collected in a systematic manner would be useful, and that the results would assist in capturing the concerns and stories that are out there, and would assist in organizing the information.

Howard Kator stated that he felt the survey approach was consistent with what the health workgroup discussed.

Barry Dunkley asked how the expected scenarios identified by the survey would be used.

Ralph Allen stated it would give some notion of the numbers of people affected, and how they became aware of the biosolids application.

Barry Dunkley stated that in the past citizens may not have been aware of applications before they occurred, but now that local governments make them aware, but that may not be sufficient.

Ralph Allen noted that the survey may help find out how people are made aware and if existing procedures are sufficient.

Alan Rubin stated that he would endorse Dr. Allen moving forward with the survey, but commented that the panel will need much more than a survey to effect policy change or change regulation.

Russ Baxter stated that while it may not effect policy change, it will demonstrate what other needs there are in order to produce change. He stated that it may reveal what additional work is necessary in order to make good decisions.

Jonathan Sleeman stated that the survey would be a good hypothesis generation exercise, and may identify trends in medical issues. He also asked what FOIA issues would be involved.

Russ Baxter noted that the information would not be subject to FOIA until in the panel's possession. He also recommended that the panel have a FOIA council representative present at the meetings.

Scott Johnson noted that there is no name on the survey form, so all the results would remain anonymous.

Ralph Allen noted that he has his students available for this project for less than a month now, and they needed to move forward in order to get any information. He noted that his students recognize more information will be necessary, but this is a start.

Chris Peot noted that the questionnaire lacked information about medical history, and seemed to pre-determine that the medical condition was a result of biosolids. He recommended that if the information is going to come back to the panel, that the panelist's should be as comfortable with the questionnaire as possible. He encouraged the panelists to get back to Dr. Allen as soon as possible with their comments.

Mike Foreman noted that it seemed the panel was in general agreement that the survey is okay to move forward, and asked Secretary Tavenner's reaction.

Secretary Tavenner agreed.

Neil Zahradka stated that he will work with Dr. Allen individually to provide any additional contacts that he may have.

## Development of 2007 Report

Mike Foreman referred to the agenda and asked Neil Zahradka to begin discussion regarding development of the 2007 report.

Neil Zahradka noted that the due date of the report will be January 9, 2008, not November 30, 2007 as discussed at previous meetings. The November 30, 2007 date in the resolution only dictates by what date the panel will conclude its meetings for 2007.

Neil Zahradka noted that if the panel has any recommendations for the 2008 General Assembly, today's meeting would be the time to do that.

Barry Dunkley recommended having a draft completed by November 30, 2007.

Alan Rubin asked what the purpose of the interim report is to be.

Secretary Tavenner stated that this report is primarily to describe what has happened so far with regard to makeup of the group and its list of issues to consider. She offered the opinion that legislative or budget recommendations and specific ranking of issues may be premature for this report. She also suggested that with regard to future meeting dates, the panel should have the majority of the work completed by August 2008 in order to have a legislative or budgetary impact, as that timeframe would match the Governor's schedule for budget preparation.

Alan Rubin asked for clarification as to whether listing of items in order of priority was to be included in the first report.

Secretary Tavenner replied that the listing should align with what was discussed at the two workgroup meetings.

Barry Dunkley stated he felt the final report in 2008 would include recommendations, and the 2007 report will define the way in which the panel plans to conduct its work.

Alan Rubin added that the specific items he considers the main issues are not necessarily expressed in priority order in the material presented so far. He believes there are specific issues that need to be listed as the topics of priority.

Neil Zahradka clarified that the items that Alan Rubin has identified as the highest priority items are included in the draft outline, just not necessarily in the same order as he has expressed in past meetings.

Barry Dunkley noted that if the goal is to complete work by next August, the workplan needs to be revised

Henry Staudinger asked if the content of the final report could be amended with information that comes in after today.

Russ Baxter stated that what we hope to include in the report is how the panel hopes to proceed with its work in the coming year.

Mike Foreman asked Neil Zahradka if he could provide a draft report by November 30.

Neil Zahradka indicated that he could elaborate on the structure provided today by the end of the month.

### Future meeting dates

Mike Foreman referred to the agenda and began the discussion on future meeting dates of the panel.

Russ Baxter asked if the panel would like to have some form of formal public review of the panel's findings.

Barry Dunkley asked if putting the report on the website would achieve that.

Russ Baxter stated that he was wondering whether or not a defined period for public comment should be worked into the schedule, whether it was after accessing through the web or after a public hearing. The dates for these could be worked into the meeting schedule.

Barry Dunkley suggested putting the report on the web with a thirty day comment period, and having an additional meeting after the comment period to receive verbal comments as well.

Scott Johnson stated that a public comment period is a good thing, but did not believe that specific dates could be established today. He recommended adding this additional time for public comment instead of the 20-30 minute opportunity at each meeting.

Russ Baxter also noted that a field trip schedule should be included in the planning.

Neil Zahradka noted that the dates suggested in the draft report structure were based on dates Jeff Corbin had sent to the environmental workgroup, and that it was expected that the panel needed to examine whether those dates were appropriate for all meetings.

Alan Rubin noted that it is expected that all panel members will not be able to attend every meeting. He also stated he is a proponent of full day meetings, with one workgroup meeting in the morning and one in the afternoon, and possibly a full panel meeting as well.

Scott Johnson replied that the two workgroups on the same day would be fine, but since it is expected that each workgroup will present their information to the full panel, presentation of that material would be difficult to compile on the same day.

Barry Dunkley agreed with Scott Johnson in that some time was needed between workgroup meetings and full panel meetings to work on tasks.

Tom Fox suggested shortening the time between the full panel meeting in June, perhaps move the June 25<sup>th</sup> meeting to late April or May.

Scott Johnson suggested the panel may need more time between April and June to work on some things.

Barry Dunkley recalled the August report goal, and asked if we would still have meetings in the fall.

Scott Johnson suggested that the additional meetings would be held in order to allow for holding a public hearing after the final report, and then meeting again as a full panel afterwards to address issues that are brought forth.

Neil Zahradka noted that the November 2008 meeting date was not yet established. The panel agreed that November 19<sup>th</sup> would be suitable.

# Public Comment

Mike Foreman asked if there were any members of the audience that would like to offer public comment. No one in attendance expressed a desire to speak.

Mike Foreman asked the panel if there were any other items not on the agenda that they would like to see addressed. No response was received from the panel.

Secretary Tavenner adjourned the meeting at 3:40 PM.

# Next Meeting Dates

Secretary Tavenner adjourned the meeting at 3:40 p.m.